

WHAT IS CLAIMED IS:

1. A polishing apparatus comprising:  
  
a polishing section having a turntable with a polishing surface and a top ring for holding a substrate and pressing the substrate against said polishing surface to polish a surface having a semiconductor device thereon; and  
  
a cleaning section for cleaning the substrate which has been polished, said cleaning section having an electrolyzed water supply device for supplying electrolyzed water to the substrate to clean at least a polished surface of the substrate while supplying said electrolyzed water to the substrate.
2. A polishing apparatus according to claim 1, wherein said electrolyzed water supply device supplies said electrolyzed water to said polished surface and a back surface opposite to said polished surface of the substrate.
3. A polishing apparatus according to claim 1, further comprising an ultrasonic transducer for applying ultrasonic vibrations to said electrolyzed water before supplying said electrolyzed water to the substrate.
4. A polishing apparatus according to claim 1, further comprising a supply device for supplying diluted hydrofluoric acid to the substrate.
5. A polishing apparatus according to claim 1, wherein the substrate has a copper layer thereon.

6. A polishing apparatus comprising:

a polishing section for polishing a surface of a substrate by holding the substrate and pressing the substrate against a polishing surface, the surface of the substrate having a semiconductor device thereon; and

a cleaning section for cleaning at least a polishing surface of the substrate while supplying electrolyzed water to the substrate such that a metal-oxide film is formed on the polished surface of the substrate by said supplying electrolyzed water.

7. A polishing apparatus comprising:

a polishing surface for conducting a primary polishing of a surface of a substrate by holding the substrate and pressing the substrate against the polishing surface, the surface of the substrate having a semiconductor device thereon;

a cleaning section for cleaning at least a polished surface of the substrate while supplying electrolyzed water to the substrate such that a metal-oxide film is formed on the polished surface of the substrate by said supplying electrolyzed water; and

another polishing surface for conducting a secondary polishing of the polished surface of the substrate by holding the substrate and pressing the substrate against said another polishing surface.

8. A polishing apparatus comprising:

a polishing section for polishing a surface of a substrate by holding the substrate and pressing the substrate against a polishing surface, the surface of the substrate having a semiconductor device thereon;

an electrolyzed water supply device for supplying electrolyzed water to a polished surface of the substrate such that a metal-oxide film is formed on the polished surface of the substrate by said supplying electrolyzed water; and

a supply device for supplying diluted hydrofluoric acid to the substrate after said supplying electrolyzed water.